

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A semiconductor passive Q-switch [providing variable outputs] suitable for use in a laser system to produce laser pulses having [defined] variable output characteristics including a lasing wavelength, wherein said semiconductor passive Q-switch [including variable transmittance means] has a coating with variable transmittance for different locations of said coating at the lasing wavelength for tuning said output characteristics of said laser pulses.
2. (Previously Amended) A semiconductor passive Q-switch according to claim 1 wherein said output characteristics include pulse duration, pulse repetition rate, peak power and averaged output power of said laser pulses.
3. (Currently Amended) A semiconductor passive Q-switch according to claim 1 [wherein said variable transmittance means includes] **comprising** a wafer having two surfaces that are optically polished, one or both surfaces being optically coated to form a gradient variation of transmission at a wavelength substantially in the IR region.
4. (Previously Amended) A semiconductor passive Q-switch according to claim 3 wherein said surfaces are optically coated to form a gradient variation of transmission at a wavelength in the IR region.
5. (Cancelled)

6. (Previously Amended) A semiconductor passive Q-switch according to claim 1 wherein tuning of said output characteristics is effected by translating the Q-switch in a direction transverse to the optical axis of the laser system.

7. (Previously Amended) A semiconductor passive Q-switch according to claim 1 wherein tuning of said output characteristics is effected by moving the Q-switch in a curvilinear path.

8. (Previously Amended) A semiconductor passive Q-switch according to claim 7 wherein said curvilinear path included circular rotation.

9. (Previously Amended) A semiconductor passive Q-switch according to claim 1 wherein said Q-switch functions simultaneously as an output coupler of said laser system.

10. (Previously Amended) A semiconductor passive Q-switch according to claim 1 including undoped GaAs.

11. (Previously Amended) A semiconductor passive Q-switch according to claim 1 including doped or undoped semiconductor material having properties of saturable absorption in the IR spectrum.

12. (Previously Amended) A semiconductor passive Q-switch according to claim 11 wherein said semiconductor material includes AlGaAs or InP.

13. (Previously Amended) A semiconductor passive Q-switch according to claim 1 having a multiple-quantum-well configuration.

14. (Original) A laser system incorporating a semiconductor passive Q-switch according to claim 1, said laser system including a solid-state laser that is diode-end-pumped, diode-side pumped, hybrid-pumped, lamp-pumped or pumped with other lasers.

15. (Original) A laser system incorporating a semiconductor passive Q-switch according to claim 1 and adapted to produce a laser output at a wavelength centered at an IR wavelength.

16. (Original) A laser system according to claim 15 wherein said IR wavelength is 1.06 μ m.

17. (New) A semiconductor passive Q-switch suitable for use in a laser system to produce laser pulses having variable output characteristics including a lasing wavelength, wherein said semiconductor passive Q-switch comprises a body of material having variable thickness at different locations of said body for tuning said output characteristics of said laser pulses.